

## ABSTRACT

A transmission amplifier for amplifying a signal to be transmitted includes an amplifying unit that is warmed efficiently when the temperature is low. In a constitution in which an amplifying unit amplifies a signal, a temperature detecting means detects temperature. Amplifying-unit-self-heating-facilitation control means perform control for facilitating self-heating by the amplifying unit when temperature detected by the temperature detecting means is lower than a predetermined threshold value, or equal to or lower than the predetermined threshold value. The amplifying-unit-self-heating-facilitation control means perform, for example, bias control for the amplifying unit as the control for facilitating self-heating by the amplifying unit.